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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/856,416 Filing Date: March 31, 2004

Appellant(s): VON JAKUSCH ET AL.

William J. Bond For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 25 September 2007 appealing from the Office action mailed 02 March 2007.

09/856,416 Art Unit: 3761

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

WO 96/21413	Tuschy et al.	7-1996
US 3,716,437	Newman et al.	2-1973
US 5,616,629	Nguyen et al.	4-1997

09/856,416 Art Unit: 3761

(9) Grounds of Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

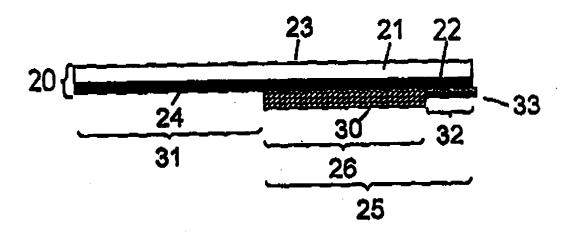
- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

09/856,416 Art Unit: 3761

1. Claims 1, 2, 4-10, 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tuschy *et al.* (WO 96/21413 A1, hereinafter "Tuschy") in view of Nguyen *et al.* (US 5,616,629 A; hereinafter "Nguyen") and Newman *et al.* (US 3,716,437; hereinafter "Newman").

Regarding claim 1, Tuschy teaches an adhesive tape (20) comprising a fibrous nonwoven layer (21) of fibers with a silicone release coating on one surface (23) and a pressure-sensitive adhesive layer (24) on the opposite surface (22)(page 5, lines 17-33; page 6, lines 25-37)(figure 2, infra).



Tuschy does not disclose the specific type of silicone coating or that the nonwoven material is plastic.

Newman teaches a thermoplastic nonwoven and film laminate substrate for an adhesive tape (abstract; col. 2, lines 43-54). This provides for a tape that is both soft and has a high tensile strength.

Nguyen teaches the specific types of polydialkylsiloxane and acrylate release coatings (column 3, lines 11-45; column 5, line 56-column 6, line 62). This coating provides an

09/856,416 Art Unit: 3761

optimized release force. Nguyen teaches ranges of ratios of the average number of dialkysiloxane units to the average number of acrylate and methacrylate groups of the polydialkylsiloxane that overlap that of the instant invention (col. 3, lines 11-45). In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art a prima facie case of obviousness exists. MPEP § 2144.05. Specifically, in Nguyen the dialkylsiloxane group is ((Si(CH₃)₂O)_n where "n" is defined as 50-300. (R) represents acrylate, the relative amount of which is controlled by "m", the value of "m" is in the range of 1-15. There are combinations of values within the range for "n" and within the range for "m" that produce a ratio that overlaps the claimed ratio of the average number of dialkysiloxane units to the average number of acrylate and methacrylate groups of 10-15.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to select the laminate construction of Newman and the release coating of Nguyen to be used in the tape system of Tuschy in order to provide a soft, high tensile-strength substrate having a release coating with an acceptable release force.

Furthermore, all the claimed structural elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S.__, 82 USPQ2d 1385, 1396 (2007).

Regarding the specific functional characteristics concerning peel adhesion, optimization of performance vectors within prior art conditions or through routine experimentation is not sufficient to patentably distinguish an invention over the prior art. *In re Aller*, 220 F.2d 454,

09/856,416 Art Unit: 3761

456, 105 USPQ 233, 235 (CCPA 1955); In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). MPEP § 2144.05.

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

In the instant case, Nguyen teaches the importance of achieving an optimal peel strength and releasability and discloses the results of peel and release testing (col. 1, lines 18-50; col. 12, lines 6-50). If the adhesive adheres to strongly to the release surface, the tape can be damaged when it is pulled off the release surface. Conversely, a tape with inadequate adhesion to a release surface may prematurely release form the release surface and expose the adhesive to the environment.

Regarding claims 8 and 10, Tuschy teaches a mechanical fastener (30) disposed on the adhesive layer (24)(figure 2).

Regarding claims 2 and 9, Newman teaches a film/fibrous layer laminate (abstract).

Regarding claim 4, see Nguyen col. 3, lines 11-45 and col. 4, lines 4-16.

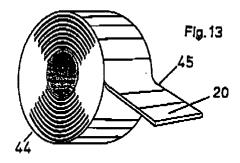
Regarding claim 5, Tuschy teaches a rubber based adhesive with a tackifying resin (page 6, line 25-page 7, line 4).

Regarding claim 6, Tuschy teaches styrene-isoprene-styrene block copolymers (page 6, line 35-page 7, line 4).

09/856,416 Art Unit: 3761

Regarding claim 7, Tuschy teaches a roll (44), see figure 13, infra.

Regarding claim 17 and 18, Nguyen teaches ranges of polysiloxane to organic compound that overlaps that of the instant invention (col. 7, lines 44-65). In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art a prima facie case of obviousness exists. MPEP § 2144.05.



(10) Response to Argument

Applicant's arguments filed 25 September 2007 have been fully considered but they are not persuasive.

Applicants assert that the focus of Tuschy was not the backing but how to create a stable roll. This argument is not persuasive because regardless of the primary focus of Tuschy, it recites a backside release surface (23) that may be made of silicone (page 5, lines 17-33). Tuschy teaches that the adhesive tape (20) may be provided in a roll (44)(figures 2 & 13). The release surface (23) is capable of protecting an adhesive layer (24) adhered thereto when the tape (20) is in a roll (44) and allows such an adhesive layer (24) to be released from the release surface (23).

09/856,416 Art Unit: 3761

Applicants further assert that Tuschy's mechanical fastener (30) would act as a spacer preventing the adhesive layer (24) from contacting the backside surface (23). This argument is not persuasive because applicants' claimed invention does not recite any limitation where the release layer comes into to contact with, or is designed to come into contact with the adhesive layer. Instead applicant's invention claims an adhesive tape having a specific peel adhesion relative to a polyethylene film surface. It does not require that the polyethylene film surface is to be part of the tape. Furthermore, Tuschy teaches an embodiment in figure 2 that when provided in a roll, would have some contact between the surfaces (23, 24).

In response to applicant's argument that Nguyen teaches a release liner covered tape rather than coating the back of a tape, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The release compositions of Nguyen would be equally suitable as a release surface on a tape or as part of a separate release sheet. See Nguyen col. 1, lines 18-36 and col. 11, lines 12-33.

Applicants assert that the goal of Nguyen was to increase the level of adhesion between their removable release liner and the adhesives of the covered PSA tape. This argument is not persuasive because Nguyen teaches a release material that is known in the art to be suitable for use as a release material for adhesive tapes (col. 1, lines 18-36). Regarding the claimed release values, applicants assert that the release surface of Nguyen would have to be modified, for example, by removing the MQ resin. This argument is not persuasive because it would have

09/856,416 Art Unit: 3761

been obvious to one of ordinary skill in the art to optimize the release values of Tuschy in view of Nguyen by modifying some of the compounds in the release surface.

Applicants assert that the specific examples disclosed in Nguyen do not teach the claimed ratio of the average number of dialkysiloxane units to the average number of acrylate and methacrylate groups. This argument is not persuasive because regardless of the specific examples in the reference, as discussed in detail supra, the reference's broad disclosure teaches ranges of values that overlap those of the instant invention (col. 3, line 11-45).

Applicants assert that the Nguyen does not teach how to change the release values. This argument is not persuasive because Nguyen teaches the importance of achieving an optimal peel strength and releasability and discloses the results of peel and release testing (col. 1, lines 18-50; col. 12, lines 6-50). It would have been obvious for one of ordinary skill in the art to optimize these values as discussed supra.

Applicants assert that Nguyen teaches higher relative adhesive release forces according to the Kiel test than that of the instant invention. This argument is not persuasive because as discussed supra, it would have been obvious to optimize the peel force of the adhesive tab and release surface of Tuschy in view of Newman and Nguyen. The differences in the specific tests protocols between that of Nguyen and the instant invention do not change the fact that it would have been obvious to optimize these values.

(11) Related Proceedings

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

09/856,416 Art Unit: 3761 Page 10

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted:

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Conferees:

Tatyana Zalukaeva

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Kevin Sirmons

KEVIN C. SIRMONS SUPERVISORY PATENT EXAMINER